MULTIMEDIA ⬤ UNIVERSITY

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FINAL EXAMINATION

TRIMESTER 3, 2018 / 2019 SESSION

PPE0044 – BASIC MICROECONOMICS
(Foundation in Business)

29 MAY 2019
2.30p.m. – 4.30 p.m.
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **NINE** pages.

2. Answer **ALL** the questions in **Sections A and B**.

3. Shade your answers for **Section A** on the OMR sheet. Write your answers for **Section B** in the Answer Booklet.

SECTION A: MULTIPLE-CHOICE QUESTIONS [30 MARKS]

Instructions: Answer **ALL** questions in this section. Shade your answers on the **OMR** sheet.

1. The price elasticity of demand measures which of the following?
   A. The slope of the demand curve.
   B. The percentage-slope of the demand curve.
   C. The rate at which demand changes when price changes.
   D. How responsive the quantity demanded is to changes in price.

2. After short hair for women became popular, barbers found that their income fell. In an attempt to boost their incomes, many barbers raised the price of a haircut and yet their total revenue fell even more. What can explain this result?
   A. Haircuts are inferior goods.
   B. The demand for haircuts by barbers is elastic because of many substitutes.
   C. The demand for haircuts by barbers became inelastic after the increase in price.
   D. The demand for haircuts by barbers is inelastic because most people need haircuts.

3. If you know the cross elasticity between two goods is negative, then you know the goods are _____.
   A. normal goods
   B. inferior goods
   C. substitute goods
   D. complementary goods

4. The cross elasticity of demand for butter and margarine is likely to be _____.
   A. positive because they are substitutes
   B. negative because they are substitutes
   C. positive because they are complements
   D. negative because they are complements

5. When Landy's income increases by 20 percent, her demand for tickets to professional baseball games increases by 10 percent. Landy's demand for tickets is income _____. For Landy, baseball tickets are _____ goods.
   A. elastic; normal
   B. elastic; inferior
   C. inelastic; normal
   D. inelastic; inferior

6. When Aliff receives an increase in his salary from RM1,800 a month to RM2,200 a month, he increases the quantity of hot chocolate that he buys from 19 cups to 21 cups a month. Aliff's demand for hot chocolate is income _____. For Aliff, hot chocolate is _____ good.
   A. elastic; a normal
   B. elastic; an inferior
   C. inelastic; a normal
   D. inelastic; an inferior

Continued...

7. If the price elasticity of supply of corn is 0.5, then the supply of corn is _____.
   A. elastic
   B. inelastic
   C. unit elastic
   D. perfectly elastic

8. *Exhibit 1* shows the price and quantity supplied of apple juice in a small town.

Price (RM per can)	Quantity supplied (cans per day)
9	49
11	51

Exhibit 1

Based on *Exhibit 1*, when the price of apple juice increases from RM9 a can to RM11 a can, the elasticity of supply is _____.
   A. 0.20
   B. 0.90
   C. 1.25
   D. 5.00

9. *Exhibit 2* represents the market for guavas both before and after the imposition of an excise tax, which is represented by the shift of the supply curve.
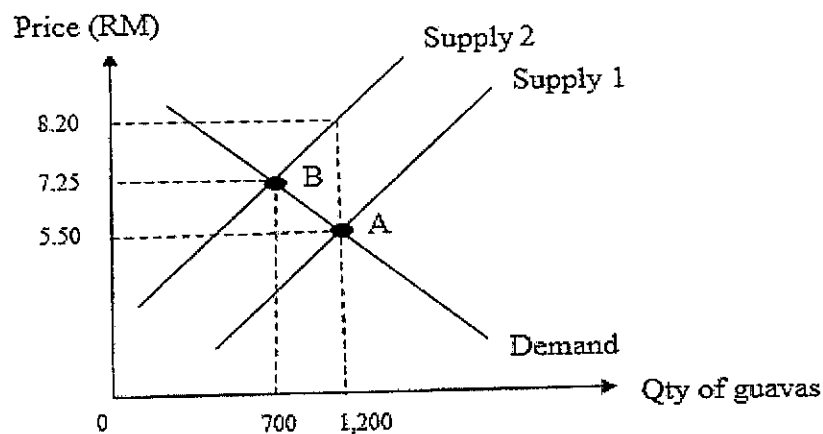

Exhibit 2

Based on *Exhibit 2*, before the tax, store owners are willing to sell _____ guavas at a price of _____ each.
   A. 0; RM8.20
   B. 700; RM7.25
   C. 1,200; RM5.50
   D. 1,200; RM8.20

Continued...

10. Which of the following, if true, would most effectively support the argument that raising cigarette taxes reduces the number of people who smoke cigarettes?
    A. The supply for cigarettes is relatively elastic.
    B. The demand for cigarettes is relatively elastic.
    C. The supply for cigarettes is relatively inelastic.
    D. The demand for cigarettes is relatively inelastic.

11. Assume that Ali owns a business and his explicit costs are RM10,000 per year. He could earn RM11,000 in his next-best alternative job. His revenue is RM22,000 per year. What is his accounting profit?
    A. RM1,000
    B. RM2,000
    C. RM11,000
    D. RM12,000

12. Economic profits are _____.
    A. the same as accounting profits
    B. greater than accounting profits
    C. equal to total revenue minus both explicit and implicit costs
    D. equal to total revenue minus the sum of explicit fixed and variable costs

13. With respect to production, the short run is best defined as a time period _____.
    A. lasting about two years
    B. lasting about six months
    C. in which all inputs are fixed
    D. in which at least one input is fixed

14. In the long run, the law of diminishing marginal returns _____.
    A. is exactly the same as in the short run
    B. does hold, regardless of production process
    C. sometimes holds, depending on the production process
    D. is not relevant because there are no fixed factors of production

15. Due to the law of diminishing marginal product, _____.
    A. marginal cost falls
    B. the average total cost curve falls
    C. long-run average cost eventually rises
    D. the marginal product of labour eventually falls

16. When a firm's total product curve is increasing at a decreasing rate, _____.
    A. average product is zero
    B. average product is falling
    C. marginal product is positive but declining
    D. marginal product is negative and decreasing

Continued...

17. Assume both the marginal cost and the average variable cost curves are U-shaped. At the minimum point on the average variable cost curve, marginal cost must be

_____.
A. at its minimum
B. equal to average variable cost
C. less than average variable cost
D. greater than average variable cost

18. If a firm doubles its output, but finds that its long run total cost (LRTC) increases less than doubles, the firm is experiencing _____.
A. economies of scale
B. diseconomies of scale
C. constant returns to scale
D. increasing returns to labour

19. When an increase in the scale of production leads to higher average costs, the industry exhibits _____.
A. diminishing returns
B. constant returns to scale
C. increasing returns to scale
D. decreasing returns to scale

20. For constant returns to scale, a(n) _____ in a firm's scale of production leads to _____ average total cost.
A. increase; lower
B. increase; higher
C. decrease; a change in
D. decrease; no change in

21. In perfect competition, _____.
A. only firms know their competitors' prices
B. there are restrictions on entry into the industry
C. there are many firms that sell similar products
D. firms in the industry have advantages over firms that plan to enter the industry

22. The price of a seller's product in perfect competition is determined by _____.
A. the individual seller
B. a few of the sellers
C. the individual demander
D. market demand and market supply

23. Suppose the equilibrium price in a perfectly competitive industry is RM10 and Firm A in the industry charges RM12. Which of the following will happen?
A. Firm A's profits will increase.
B. Firm A's revenue will increase.
C. Firm A will not sell any output.
D. Firm A will sell more output than its competitors.

Continued...

24. *Exhibits 3* shows the price and cost of producing goods A in a perfectly competitive firm.

Price and Cost (RM)
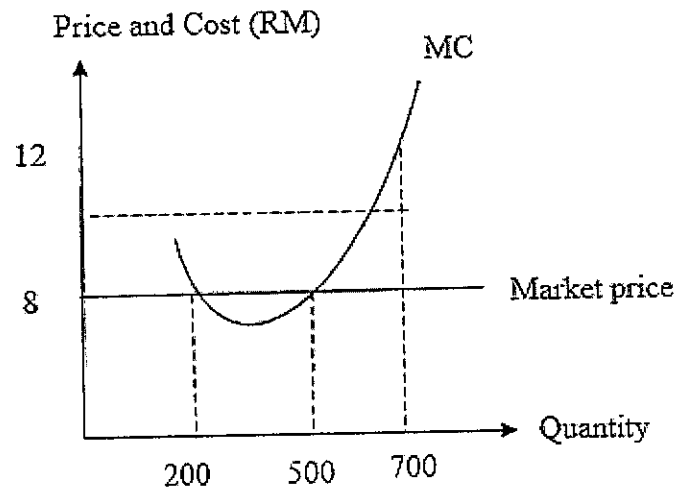
MC

12

8   Market price

Quantity

200   500   700

Exhibit 3

Based on *Exhibit 3*, if the firm is producing 700 units, _____.

A. it is making a loss
B. it is making a profit
C. it should increase its output to maximise profit
D. it should cut back its output to maximise profit

25. *Exhibit 4* shows cost and demand curves facing by a typical firm in a constant-cost perfectly competitive industry.
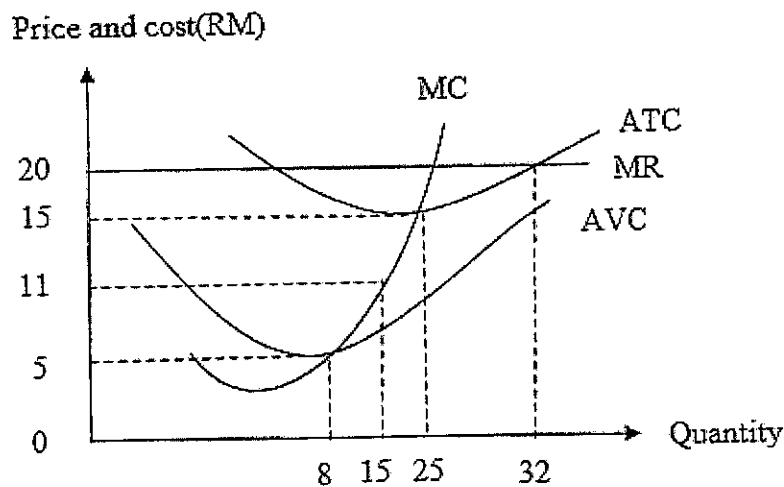

Price and cost(RM)

MC

ATC

20   MR

15   AVC

11

5

0   Quantity

8 15 25   32

Exhibit 4

Based on *Exhibit 4*, what is the minimum price the firm requires to produce output?

A. RM5
B. RM11
C. RM15
D. RM20

Continued...

26. If a perfectly competitive seller is maximising profit and is making zero economic profit, which of the following will this seller do?
    A. Shut down, with a loss equal to total fixed cost.
    B. Increase production in order to make an economic profit.
    C. Continue at the current output, making zero economic profit.
    D. Remain open but decrease production in order to make an economic profit.

27. A perfectly competitive short run firm's supply curve follows the upward-sloping segment of its marginal cost curve above the _____.
    A. average total curve
    B. average price curve
    C. average fixed cost curve
    D. average variable cost curve

28. In long run equilibrium for a perfectly competitive firm, price equals which of the following?
    A. Economies of real cost
    B. Maximum total revenue
    C. Diseconomies of scale cost
    D. Minimum point on the long-run average cost curve

29. A monopolist faces _____.
    A. the market demand curve
    B. a vertical demand curve
    C. a horizontal demand curve at the market price
    D. many substitutes for its product or service

30. The price charged by a monopolistic competitor is _____.
    A. lower than the marginal cost of production
    B. higher than the marginal cost of production
    C. higher than the price charged by a monopolist
    D. lower than the price charged by a perfect competitor

Continued...

SECTION B: STRUCTURED QUESTIONS [70 MARKS]

Instructions: Answer **ALL** questions in this section. Write your answers in the answer booklet provided.

Question 1

Part A

Vincent is a Sudoku maniac, but he also likes jigsaw puzzle. *Exhibit 5* shows Vincent's marginal utility from Sudoku and jigsaw puzzle. The price of a set of Sudoku is RM2, the price of a box of jigsaw puzzle is RM1, and Vincent has an income of RM11.

Sudoku (S)		Jigsaw puzzle (J)	
Quantity	Marginal Utility	Quantity	Marginal Utility
1	90	1	50
2	80	2	40
3	70	3	30
4	60	4	20
5	50	5	15
6	40	6	10

Exhibit 5

Based on *Exhibit 5*,

a) compute Vincent's total utility (TU) and marginal utility to price ratios (MU/P) for both Sudoku and jigsaw puzzle.

(12 marks)

b) if Vincent buys 3 sets of Sudoku and 3 boxes of jigsaw puzzle, does he maximise his total utility? Show your working and briefly explain your answer.

(4 marks)

c) which combination of Sudoku and jigsaw puzzle would maximise Vincent's total utility? Show your working and briefly explain.

(4 marks)

Part B

Exhibit 6 shows a consumer is able to consume the following bundles of cakes and bananas when the price of cake is RM4 each and the price of banana is RM6 each.

Quantity of cake(s) to consume	Quantity of banana(s) to consume
24	0
12	8
0	16

Exhibit 6

Based on *Exhibit 6*,

a) calculate the consumer's income.

(2 marks)

b) draw a budget constraint with cake(s) on the vertical axis and banana(s) on the horizontal axis. Carefully label it as B.

(2 marks)

c) refer to your answer in (b), calculate the slope and form the budget equation.

(4 marks)

Continued...

d) given the original prices for cake (RM4 each) and banana (RM6 each), use the same diagram you have drawn in (b) to construct a new budget constraint if this consumer's income increased to RM120. Label this as C.

(2 marks)

[TOTAL 30 MARKS]

Question 2

Part A

Joe owns an auto repair shop. Over the years, he has tried hiring different numbers of workers. *Exhibit 7* shows the average product for each number of workers.

Number of workers	Average product (AP)
1	5
2	7
3	10
4	11
5	10
6	9

Exhibit 7

a) Calculate total product (TP) and marginal product (MP) of each number of workers.

(6 marks)

b) At which worker does the law of diminishing marginal returns start working?

(1 mark)

c) When Joe looks at *Exhibit 7*, he says to his production manager: "Hiring 5th and 6th worker will result in less efficient operations." Do you agree with Joe's statement? Explain your answer.

(3 marks)

Part B

Exhibit 8 shows the daily output and the costs of Greentech firm.

Output	AFC (RM)	AVC (RM)
1	400.00	200.00
2	200.00	112.50
3	133.33	91.67
4	100.00	87.50
5	80.00	95.00
6	66.67	108.33
7	57.14	127.86
8	50.00	152.50

Exhibit 8

Based on *Exhibit 8*,

a) what is the firm's total fixed cost?

(2 marks)

b) if the firm produces three units of output, what is the average total cost?

(2 marks)

c) what is the total cost of producing four units of output?

(2 marks)

Continued...

d) if the firm closes down and produces no output, what will be its total cost?

(1 mark)

e) if the firm decides to increase its output from 7 to 8 units, by how much will its total cost increase?

(3 marks)

Part C

Exhibit 9 shows the output and market price of goods A in a purely competitive firm could possible produce and sell in market.

Output	Price (RM)	Total cost (RM)
0	5000	1,000
1	5000	5,000
2	5000	9,250
3	5000	13,600
4	5000	18,050
5	5000	23,050
6	5000	28,550

Exhibit 9

Based on *Exhibit 9*,

a) compute total revenue, total profit/(losses) and marginal cost at each level of output.

(10 marks)

b) refer to your answer in (a), what is the profit-maximising level of output based on total approach and marginal approach for this firm?

(1 mark)

c) can the producer of goods A earns economic profit in the long run? What will happen to the perfect competitive firm in the long run? Briefly explain.

(5 marks)

d) refer to your answer in (c), sketch a diagram that faced by this perfect competitive firm in long run. Your diagram should include MR, MC, ATC and AR.

(4 marks)

[TOTAL 40 MARKS]
End of paper